

FACILITIES INVENTORY

Existing and future, year 2000 and year 2020, respectively, wastewater treatment/reclamation facilities and associated infrastructure within the study area were inventoried. The purpose of the inventory was to,

- Identify existing treatment facilities and infrastructure
- Identify reclaimed water transmission infrastructure
- Determine current wastewater flows
- Determine existing reuse and disposal mechanisms and how much reclaimed water/effluent is distributed to each

Flows were generated from Monthly Operating Reports (MORs) submitted for each facility to FDEP in accordance with their permits and from monitoring data provided by the facilities. Flow data included range from October 2002 through October 2003 as denoted in Attachment A.

Wastewater Treatment/Reclamation Facilities

There are five wastewater treatment plants/reclamation facilities of significance in the study area. Effluent from the wastewater treatment/reclamation facilities is reused for urban irrigation, commercial uses, and groundwater recharge, or disposed of via surface water. Tables 2 and 3 presents recent reuse and disposal information from the facilities. Table 4 displays the existing reclaimed water demands for the study area.

Table 2
Wastewater Treatment/Reclamation 2003 Facility Summary

Facility Name	Stakeholder	Permitted Capacity (MGD)	Annual Average Daily Flow (MGD)	Maximum Monthly Flow (MGD)	Minimum Monthly Flow (MGD)
Everest WRF	Cape Coral Utilities	8.50	6.78	9.72	5.48
Southwest WRF	Cape Coral Utilities	6.60	5.36	8.34	4.28
North Fort Myers	North Ft. Myers Utilities	2.00	2.07	2.94	1.43
Waterway Estates	Lee County Utilities	1.25	0.95	1.38	0.70
Total		18.35	15.16	N/A	N/A

⁽¹⁾ Permitted capacity and Annual Average Daily Flow take from DEP publication. Maximum and Minimum Monthly Flow were calculated based on Waterway Estates factors.

Table 3
Reuse and Disposal 2003 Summary

Utility	Disposal Method	Annual Average Daily Flow (MGD)	Maximum Monthly Flow (MGD)	Minimum Monthly Flow (MGD)
Cape Coral Utilities ⁽¹⁾	Irrigation Water	4.96	6.04	4.28
	Surface Water	1.07	6.13	-
	Deep Well Injection	-	-	-
North Ft. Myers	Irrigation Water	1.20	1.64	0.23
	Surface Water	-	-	-
	Deep Well Injection	0.87	1.58	0.28
Waterway Estates	Irrigation Water	-	-	-
	Surface Water	0.95	1.38	0.70
	Deep Well Injection	-	-	-
Total	Irrigation Water	6.16	7.68	4.51
	Surface Water	2.02	7.51	0.70
	Deep Well Injection	0.87	1.58	0.28

Notes:

Irrigation includes water pump by the Canal Pump Station, in Cape Coral, and all irrigation flow provided to the current customers. Surface Water includes river discharge.

⁽¹⁾ Includes Reclaimed and Canal Pump Station (CPS)

Note: Any discrepancies seen in the figures are due to rounding.

Table 4
Existing Reclaimed Water Users

Utility	Existing User	Average Annual Reuse Demand (MGD)
Cape Coral Utilities	109 Metered Accounts (Current) and 33,215 Unmetered Residential Accounts	22.2
North Ft. Myers ⁽¹⁾	Riverbend Golf Course, Six Lakes, Sabal Springs	1.7
Waterway Estates	Golf Course	0
Total Current Reuse Demand =		23.4

⁽¹⁾Permitted capacity

The current facility locations are shown in Figures 1 and 2. A list of potential end users for the RIDS has been determined based on information received from the local governments to determine future infrastructure needs. This will include existing and planned new golf courses, large green space areas, and future large planned residential developments. Table 5 presents the list of potential type of users and the potential major irrigation users.

Table 5
Potential Major Reclaimed Water Users

Utility	Projected Annual Average Reuse Demand (MGD)
Cape Coral	56.0
North Ft. Myers	17.6
Waterway Estates	2.8
Total Potential Reuse Demand	76.3

Reclaimed Water Transmission Facilities

Existing reclaimed water transmission facilities were identified. The focus was primarily on larger pipelines; therefore, distribution systems and smaller lines may not be shown on the maps. Figure 3 presents the existing reclaimed water transmission facilities and large users.

